

Please add the following claim:

8/27/01 7. The pipette tip magazine of claim 2, wherein the magazine has a flat upper surface.

REMARKS

Claims 1-6 have been rejected under 35 U.S.C. § 112, second paragraph.

The Examiner states that it is not clear if the deflection limitation is met solely by the stiffness of the resin or if it is related to the size and thickness of the plate. The deflection is related to both the stiffness of the material and the size dimensions. If the magazine was twice as long and wide, but the same thickness as the Applicants', the deflection should be greater.

The Examiner has stated that the description of the "edge" in claim 1, line 5 (it should be line 4) and claim 5, line 1 is indefinite. The specification, specifically on page 3 lines 9-12, describe the magazine as having front edge 12a, side edges 12b, 12c and rear edge 12d surrounding an inner region 14. The edges 12b, 12c and 12d are undercut at 13 to be supported on the ledge of the chamber. Also, on page 4, lines 4-5, it states that the "inner region 14 of the magazine comprises approximately 85% of the total surface area, with the remaining 15% comprising the edge region overlying the undercut 13", which is also shown in Figures 1 and 3. Thus, the edge is used to define the area around the outer perimeter of the magazine.

The Examiner has also stated that there is insufficient antecedent basis for the limitation of "said geometric center" in line 8 of claim 1. The Applicants disagree as the geometric

center is inherent and thus, a proper limitation. The dependency of claim 4 has been amended to correct the insufficient antecedent basis of this claim.

Claims 1, 2, 5 and 6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Taggart, U.S. Patent No. 5,882,603 in view of Stolp, U.S. Patent No. 5,630,988 and in further view of R. C. Weast et al. (1984).

The Examiner's rejection is respectfully traversed.

The Applicants' invention is directed to a pipette tip magazine specifically designed for use in automated pipetting systems having a pipetting chamber therein. The magazine comprises a generally rectangular plate having an edge surrounding an inner region. The edge is configured to be supported on a ledge of the chamber. The magazine is molded from a polymeric resin having an inherent stiffness such that when a downward force up to about 1,000 Newtons is applied to the inner region a downward deflection of the plate at the geometric center will not be more than 0.51 mm.

Taggart '603 is directed to a support rack for pipette tips. The support has a bottom member and a pair of opposing side walls that extend from the bottom member to form a cavity. At least one support member 32 is disposed within the cavity of the box. The upper surface of the support member lies in a support plane 28 such that an inserted tip holder 10 sits on the support member 32. Preferably, there is a support member 32 in between each row of tips. It is not necessary for the tip holder to have the strength required of the Applicants' tip magazine, as the tip holder is not used in an automated pipetting system, nor is it put under significant force. The tip holder of Taggart is not designed to be used in the Applicants' pipetting device nor would it probably be strong enough to work in the device.

Stolp '988 is directed to pipette tip mounting and transfer apparatus. Stolp's flat plate cannot stand on its own and must be used in conjunction with tip support 56. Again, it is the tip support, which provides the strength and not the plate itself.

Stolp does disclose that the pipettes tip assembly may be formed from polymeric thermoplastic material, however, there is no discussion that the tip holder can be used in an automatic pipetting system, it is not shaped to fit into one nor is there any discussion about the strength requirements of the plastic holder.

Weast et al. discusses the mechanical properties of polycarbonate thermoplastic materials, including modulus of elasticity, tensile strength etc.

It is insufficient that the prior art disclose the components of the patent device, either separately or used in other combination; there must be some teaching, suggestion or incentive to make the combination made by the inventor. Obviousness cannot be established by combining the teachings of prior art to produce the claimed invention, absent some teachings or suggestions supporting the combination.

It is not necessary for the tip holders of Taggart and Stolp to have the same strength requirements as the magazine used in the Applicants' automated pipetting system. Thus, there is no teaching or incentive to manufacture these holders from more expensive plastic materials.


Automated pipetting systems have been used in the marketplace for many years. It has been believed that only steel, which is extremely expensive and thus must be reused, was strong enough to withstand the force of the automated pipetting system and could provide the rigidity to resist deflection. Thus, even if the combination of Taggart, Stolp and Weast et al. were combined, there is still no suggestion that a pipette magazine, which is used in an automated pipetting system, could be made of a polymeric material such that a downward force

of up to 1,000 Newtons could produce a downward deflection of not more than 0.51 mm. A retrospective view of inherency is not a substitute for some teaching or suggestion, which supports the selection and use of various elements in the particular claimed invention.

In view of the foregoing, Applicants respectfully contend that Taggart '603, Stolp '988 and Weast et al. do not support a *prima facie* case of obviousness under the provisions of 35 U.S.C. § 103. Thus, claims 1-7 are deemed to be patentably distinguishable over the prior art of record.

The application is now considered to be in condition for allowance, and an early indication of same is earnestly solicited.

Respectfully submitted,


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